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### (54) BATTERY

### (57) Abstract:

PURPOSE: To improve the long-period wetting performance of both a given electrode and a given separator, which are components of a battery, by making the electrode, the separator and the electrolyte of the battery to be treated or added with a given surfactant.

CONSTITUTION: A battery has an electrode containing a water-repellent resin binding agent and a separator made of a water-repellent resin. The electrode, the separator and the electrolyte of such a battery is either treated or added with a surfactant containing silicon or fluorine. The former surfactant containing silicon is preferred to be a denatured silicone oil consisting of dimethylpolysiloxane and either a hydrophilic group only or both a hydrophilic and a hydrocarbon system liophilic group, especially a copolymer of polyether and dimethylpolysiloxane. The former surfactant containing fluorine preferably consists of perfluoro alkyl ane either a hydrophilic group only or both a hydrophlic group and a hydrocarbon system surfactant. Consequently, the wetting of battery components is improved, and the charge-and-discharge cycle characteristic of the battery is enhanced.

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